

PRODUCT INFORMATION PACKET

Model No: E3AC3006081B50S41100

Catalog No: E3AC3006081B50S41100

Made in Italy E3AC30 Series, General Purpose Low Voltage IEC motor IE3, Flameproof, 0,37kW,
3 phase, 965 RPM, D230/Y400V 50Hz, 80A Frame B5, 6 Poles, IC411



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Nameplate Specifications

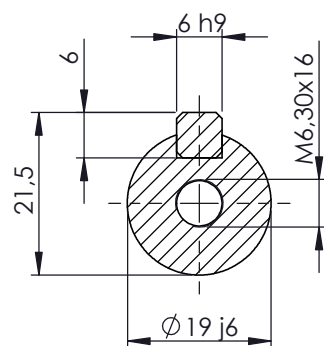
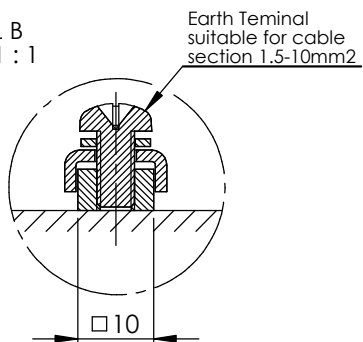
Phase	3	Output HP	0.50 Hp
Output KW	0.37 kW	Voltage	230/400 V
Speed	965 rpm	Service Factor	1
Frame	80A	Enclosure	Totally Enclosed Fan Cooled
Efficiency	73.5 %	Ambient Temperature	40 °C
Frequency	50 Hz	Current	1.1 A
Power Factor	0.64	Duty	S1
Insulation Class	F	Drive End Bearing Size	6204
Opp Drive End Bearing Size	6204	UL	No
CSA	No	CE	Yes
IP Code	IP55	Number of Speeds	1

Technical Specifications

Electrical Type	Squirrel Cage	Starting Method	Direct On Line
Poles	6	Rotation	Bi-Directional
Mounting	B5	Motor Orientation	Horizontal
Drive End Bearing	Zz	Opp Drive End Bearing	Zz
Frame Material	Cast Iron	Shaft Type	Keyed
Overall Length	373.00 mm	Frame Length	130.00 mm
Shaft Diameter	19.000 mm	Shaft Extension	40 mm
Assembly/Box Mounting	Top		
Outline Drawing	B5A048080001B01	Connection Drawing	SC-01-T-1v-1a

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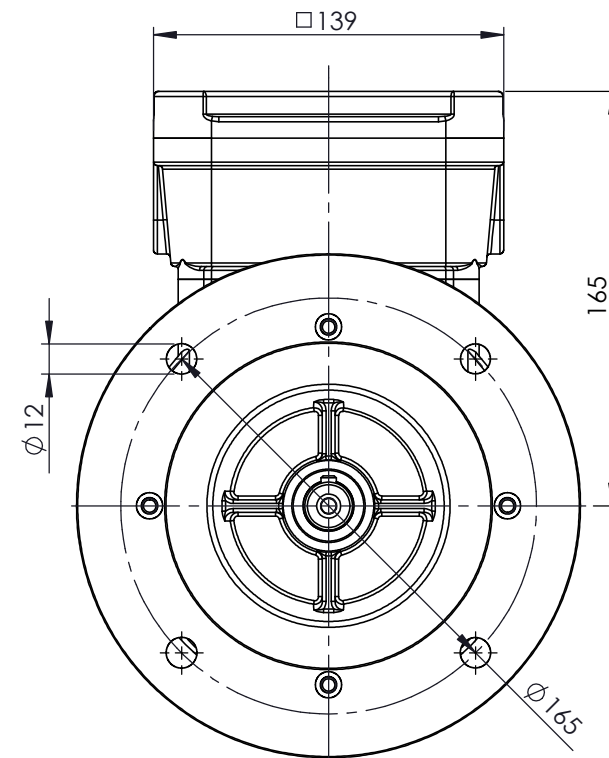
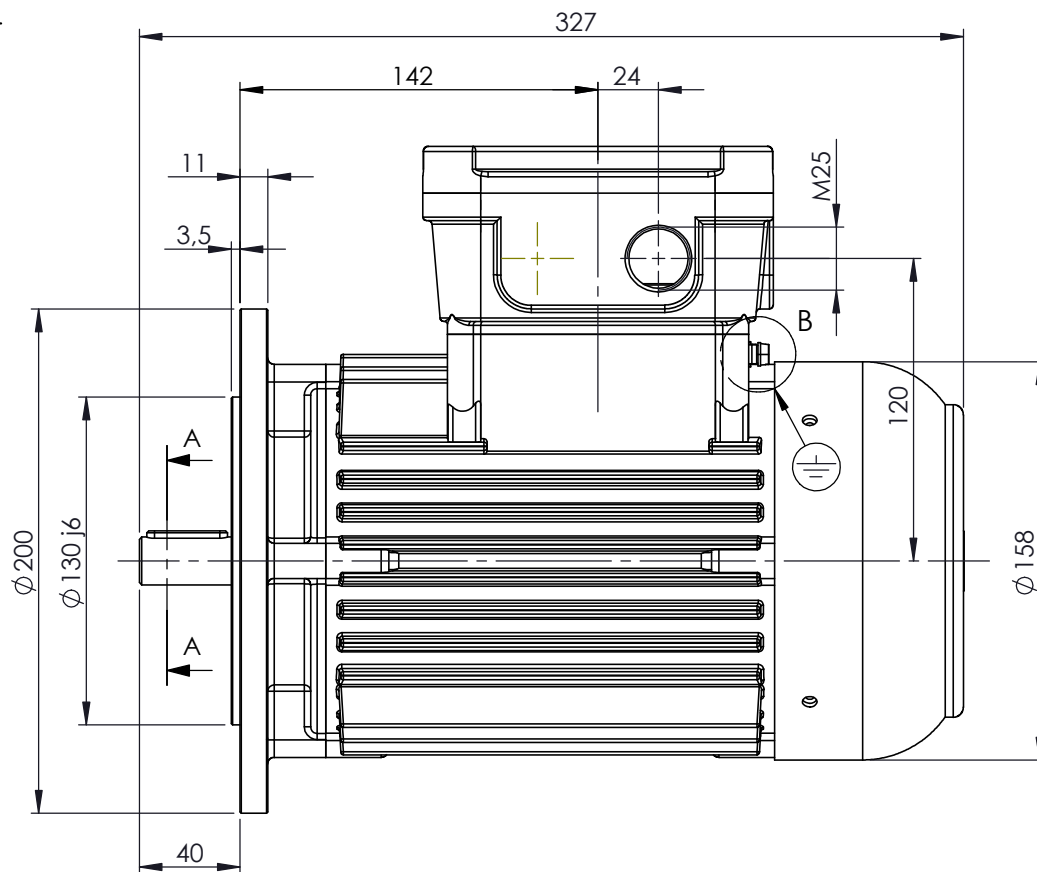
DETAIL B
SCALE 1 : 1



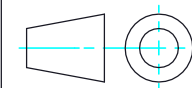
SECTION A-A
SCALE 1 : 1



Earth terminal: 1 in the terminal box, 1 on the frame.



N.B.
Dimensions in mm. according to IEC 60072
Tolerances where not differently marked $\pm 2\text{mm}$.
* Tolerances ± 0.8



Dimensions in mm
Tolerances allowed

Customer reference and additional information:

Frame size: **80**

Document N.**B5A048080001B01** - Date 09/04/2009

Issued by L.P. - Approved by D.P.

Cemp - Senago (Italy)

Rev.

0

Motor type and description

cemp
Flameproof
Motors

Schema di collegamento - *Connection diagram*
Schemas de branchement - *Schaltplan*
Esquemas de conexión



DTE 01/01/2004
SC - 01 - T - 1v.doc

**Motori trifase una velocità - *Single speed, three phase motors* - Moteurs triphasé une vitesse
Drehstrommotor Eine Drehzahlstufe - Motores trifásico una velocidad**

Collegamento - *Connection* - Connexion - *Schaltung* - Conexión



Collegamento - *Connection* - Connexion - *Schaltung* - Conexión



L1 - L2 - L3 = Linea - *Supply* - Reseau - *Netz* - Red

Per invertire la rotazione invertire due fasi - *To change the rotation reverse two phases* - Pour changer le sens de rotation inverser deux phases - *Zur Drehrichtungsänderung zwei Phasen vertauschen* - Para invertir el sentido de rotación invertir dos fases

Marcatura Morsetti Ausiliari - <i>Additional terminals marking (IEC60034-8)</i>		
Marcatura <i>Marking</i>	No. morsetti <i>terminals</i>	Morsetto ausiliare per: <i>Additional terminal for:</i>
TP1A - TP2A (allarme- <i>warning</i>)	2	Termistori PTC (alta velocità) - <i>Thermistor PTC (high speed) [*]</i>
TP1B - TP2B (allarme- <i>warning</i>)	2	Termistori PTC (bassa velocità) - <i>Thermistor PTC (low speed) [*]</i>
R1 - R2 - R3 (I sensore - <i>sensor</i>)	3	Termistore PT100 3 fili - <i>Thermistor PT 100 with 3 wires</i>
R4 - R5 - R6 (II sensore - <i>sensor</i>)	3	
R7 - R8 - R9 (III sensore - <i>sensor</i>)	3	
R11 - R12 - R13 (anteriore - <i>DE</i>)	3	Termistore PT100 su cuscinetto - <i>Thermistor PT 100 on bearing</i>
R21 - R22 - R23 (posteriore - <i>NDE</i>)	3	
TB1 - TB2 (allarme- <i>warning</i>)	2	Protettore bimetallico normalmente chiuso - <i>Normally closed bi-metallic switch (**)</i>
TB3 - TB4 (intervento- <i>switch off</i>)	2	Protettore bimetallico del freno normalmente chiuso - <i>NC brake bi-metallic switch (**)</i>
TB8 - TB9 (intervento- <i>switch off</i>)	2	
TM1 - TM2 (allarme- <i>warning</i>)	2	Protettore bimetallico normalmente aperto - <i>Normally open bi-metallic switch (**)</i>
TM3 - TM4 (intervento- <i>switch off</i>)	2	
HE1- HE2	2	Resistenze riscaldanti - <i>Space heaters</i>
U1 - U2	2	Ventilazione ausiliaria monofase - <i>Single phase forced ventilation</i>
U - V - W	2	Ventilazione ausiliaria trifase - <i>Three phase forced ventilation</i>
colori secondo schema del produttore - <i>colours according manufacturer</i>	9	Encoder
CA1 - CA2	2	Condensatore - <i>Capacitor</i>
PE	1	Conduttore di terra - <i>Earth cable</i>

[*] U nominale - *U rated* = 6V - max 30V

(**) U nominale - *U rated* = 250V

FOGLIO DATI PER MOTORI ELETTRICI ASINCRONI TRIFASI : SERIE IEC
DATA SHEET FOR ASYNCHRONOUS THREEPHASE INDUCTION MOTORS: IEC SERIES

Cliente / Customer	CEMP
Offerta / Offer : 2021.	
Impianto / Plant	-

DATI DI PROGETTO - DESIGN DATA

Modo di protezione	II2G	Motore / Frame
Type of protection		Scatola morsetti / Terminal box
Tem. Amb. Min. / Min Amb. Temp.	-20 °C	
Umidità relativa / Relative humidity	90%	
Tensione nominale / Rated Voltage	400 V +/- 5%	

Ex db IIC T4 Gb	IP55
Ex db IIC Gb	IP55
Tem. Amb. Max. / Max Amb. Temp.	40 °C
Altitudine / Altitude	< 1000 mslm / masl
Frequenza / Frequency	50 Hz +/- 2%

DATI FUNZIONALI E COSTRUTTIVI - PERFORMANCE AND CONSTRUCTION DATA

1	Quantità / Quantity		01
2	Motore tipo / Motor type		AC30r 80A 6
3	Numero di serie / Serial Number		
4	Forma costruttiva / Shape		B5
5	Certificato / Certificate	TÜV CY	17ATEX0205845X
6	Altro certificato / Other certificate		
Dati nominali / Rated data			
7	Poli / Pole	n°	6
8	Potenza nominale / Rated power	kW	0,37
9	Corrente nominale / Rated current	A	0,99
10	Velocità nominale / Full Load speed	1/min	933
11	Collegamento / Winding connection		Y
12	Isolamento / Insulation class		F
13	Sovratemperatura / Temperature rise		80K
14	Raffreddamento / Cooling type		IC411
15	Fattore di servizio / Service factor		1
16			
17	Classe di rendimento / Efficiency level	IEC 34-30	IE3
Performances elettriche / Electrical performances			
	Carico / Load	4/4	3/4
18	Giri / Speed	1/min	933
19	Corr. / Curr.	A	0,99
20	Rend / Eff	%	73,5
21	cos φ	-	0,74
Performances all'avviamento / Starting performances			
22	Ia/In - LRC/FLC	%	425
23	Cosphi a rotore bloccato / LR power factor		0,72
	Tempo a rotore bloccato / LRWT		
24	100% Un (A caldo / Warm)	sec	15
25	(A freddo / Cold)	sec	33
26	80% Un (A caldo / Warm)	sec	23
27	(A freddo / Cold)	sec	51
	Tempo di avviamento ammissibile / ART		
28	100% Un	sec	28
29	80% Un	sec	44
Curva di coppia / Speed-torque values			
30	Coppia nominale / Rated Torque	Nm	3,79
31	Ca/Cn - LRT/FLT	%	220
32	Cmax/Cn - BDT/FLT	%	245
33			
34			
35			
Varie / Other			
36			
37			
38			
39			

Servizio / Duty		
40	Servizio / Duty type	- S1
41	Intermittenza / Cyclic duration factor	-
42	Avviamenti-ora / Starting-hour	-
43	Tempo ciclo / Time	-
Cuscinetti / Bearings		
44	Cuscinetto ant / DE bearing	- 6204 ZZ
45	Cuscinetto post / NDE bearing	- 6204 ZZ
46	Carico radiale max / Max radial load in X1	N 660
47	Carico assiale max / Max axial load	N 220
48	Tipo grasso / Grease type	LGHP2 SKF or equivalent
49	Intervallo lubrificazione / Lubrication	h -
50	Quantità grasso / Quantity grease	gr -
Caratteristiche meccaniche / mechanical specification		
51	Massa / Mass	kg 26
52	Momento d'inerzia / Moment of inertia	kgm2 0,0022
53	Rumore a vuoto / Noise at no load (1 m)	Lp dB(A) 46
54	Vibrazioni / Vibration level	IEC 34-14 A
55	Limite norma / Vibration limit	mm/sec 1,60
56		
57		
Dati entrata cavi - verniciatura / Cable entry and painting		
63	Entrata cavi / Cable entry	IEC 60423 1xM25
64	Ciclo verniciatura / Painting cycle	STD
65	Colore finale / Final colour	RAL 5010
Ausiliari - Auxiliaries		
72	Sonde termiche / Temperature detector	winding -
73	Sonde termiche / Temperature detector	bearing -
74	Scaldiglie / Heaters	V / W -
75	Preparation for SPM sensor	-
76	Pressacavi / Cable glands	NO
77		

Documento preliminare - Preliminary data sheet

CURVA COPPIA/CORRENTE-GIRI TORQUE/CURRENT-SPEED DIAGRAM

Cliente / Customer CEMP

Impianto / Plant -
ITEM -

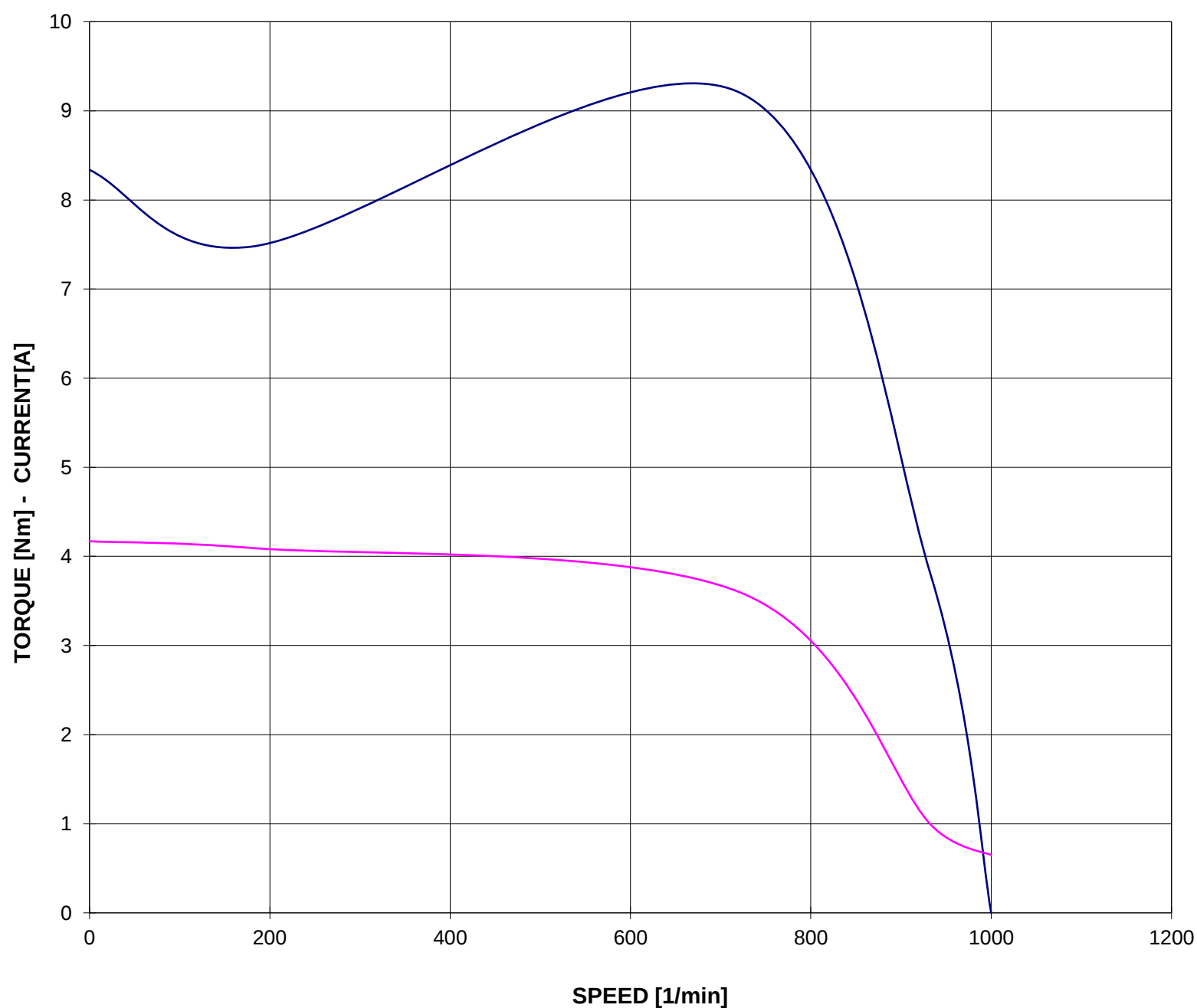
Numero d'offerta / Offer Number 2021.

Motore / Motor

AC30r 80A 6

Potenza nominale / Rated power	0,37	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	0,99	A
Velocità / Speed	933	rpm
Coppia / Torque	3,79	Nm

— COPPIA - TORQUE — CORRENTE - CURRENT



Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 28-gen-22

CURVA COPPIA/CORRENTE-GIRI (Tensione ridotta)
TORQUE/CURRENT-SPEED DIAGRAM (Reduced voltage)

Cliente / Customer CEMP

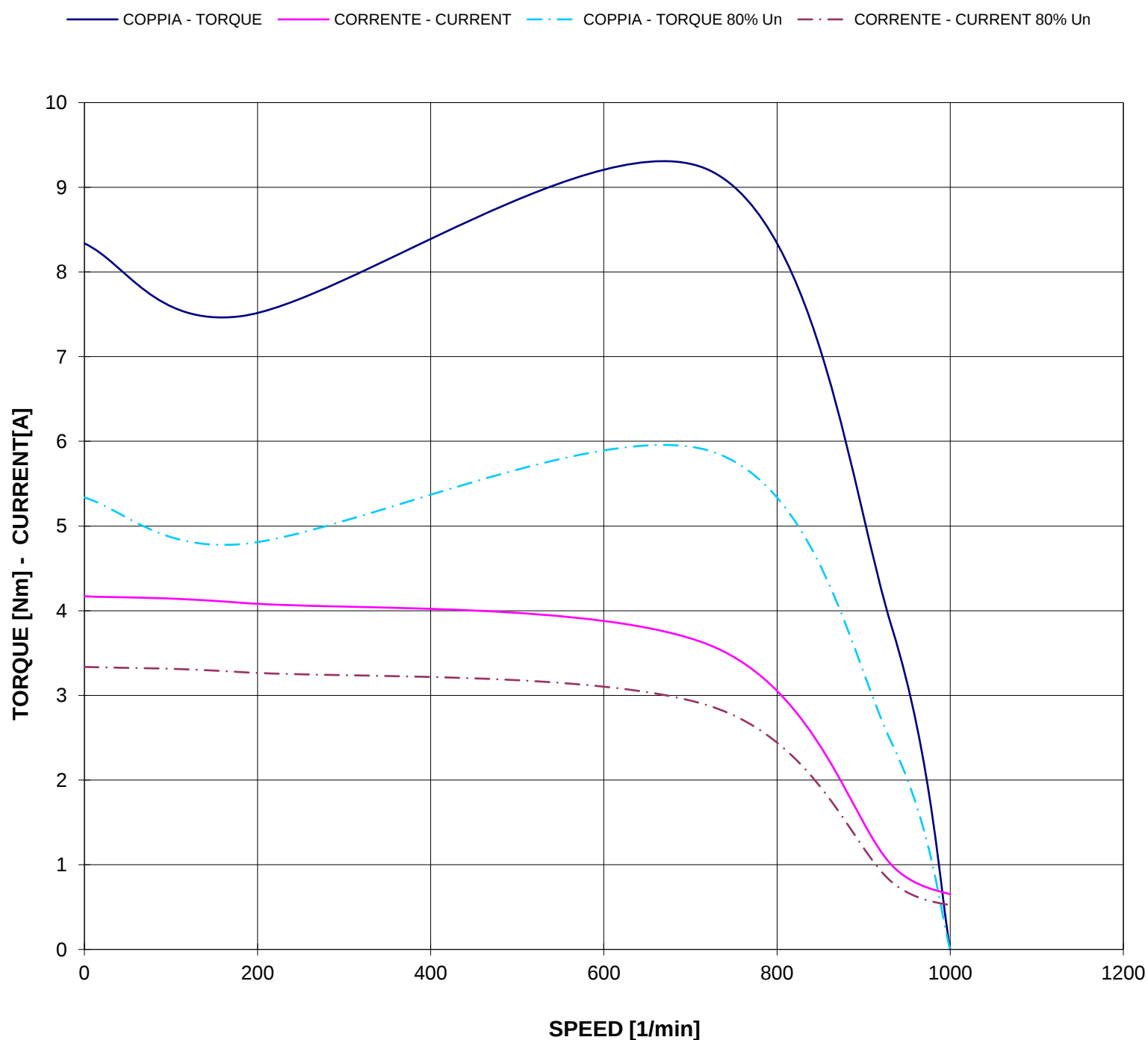
Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.

Motore / Motor

AC30r 80A 6

Potenza nominale / Rated power	0,37	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	0,99	A
Velocità / Speed	933	rpm
Coppia / Torque	3,79	Nm



Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 28-gen-22

CURVE CARATTERISTICHE PERFORMANCE CURVES

Cliente / Customer CEMP

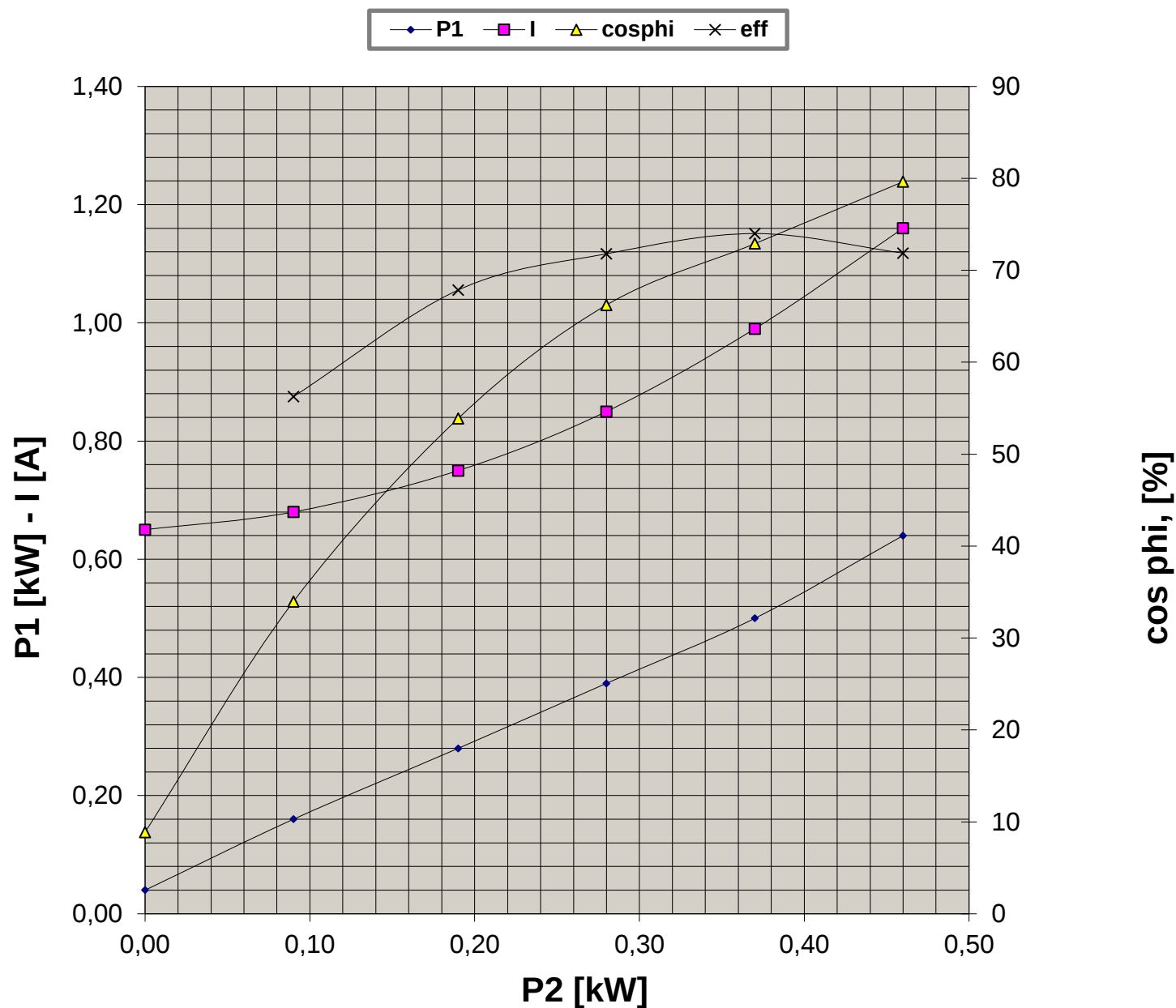
Impianto / Plant
ITEM -

Numero d'offerta / Offer Number 2021.

Motore / Motor

AC30r 80A 6

Potenza nominale / Rated power	0,37	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	0,99	A
Velocità / Speed	933	rpm
Coppia / Torque	3,79	Nm



Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 28-gen-22

CURVA LIMITE CORRENTE TEMPO THERMAL WITHSTAND CURVE

Cliente / Customer CEMP

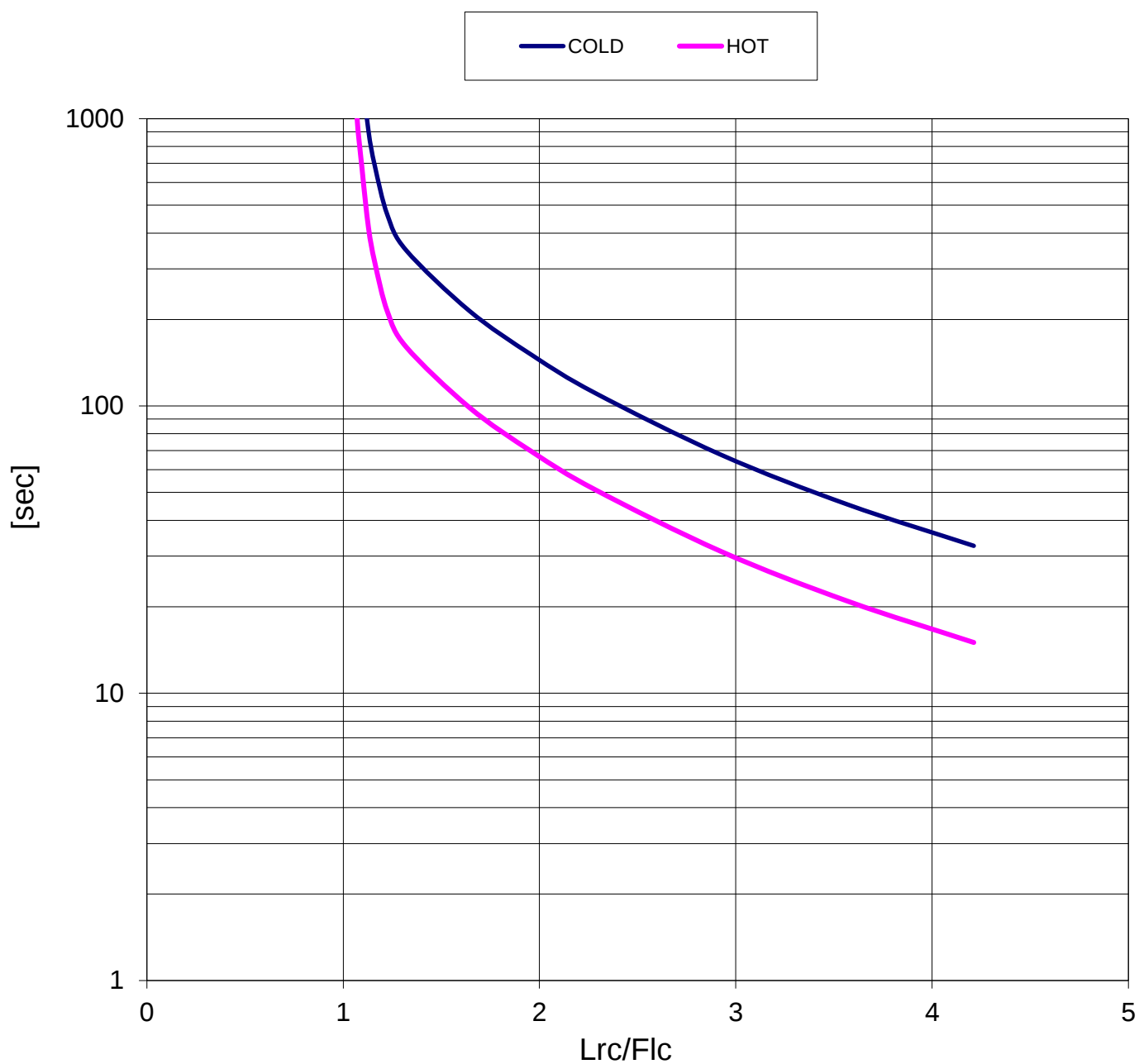
Impianto / Plant -
ITEM -

Numero d'offerta / Offer Number 2021.

Motore / Motor

AC30r 80A 6

Potenza nominale / Rated power	0,37	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	0,99	A
Velocità / Speed	933	rpm
Coppia / Torque	3,79	Nm



Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 28-gen-22

CURVA LIMITE CORRENTE TEMPO (Tensione ridotta)
THERMAL WITHSTAND CURVE (Reduced voltage)

Cliente / Customer CEMP

Impianto / Plant -
ITEM -

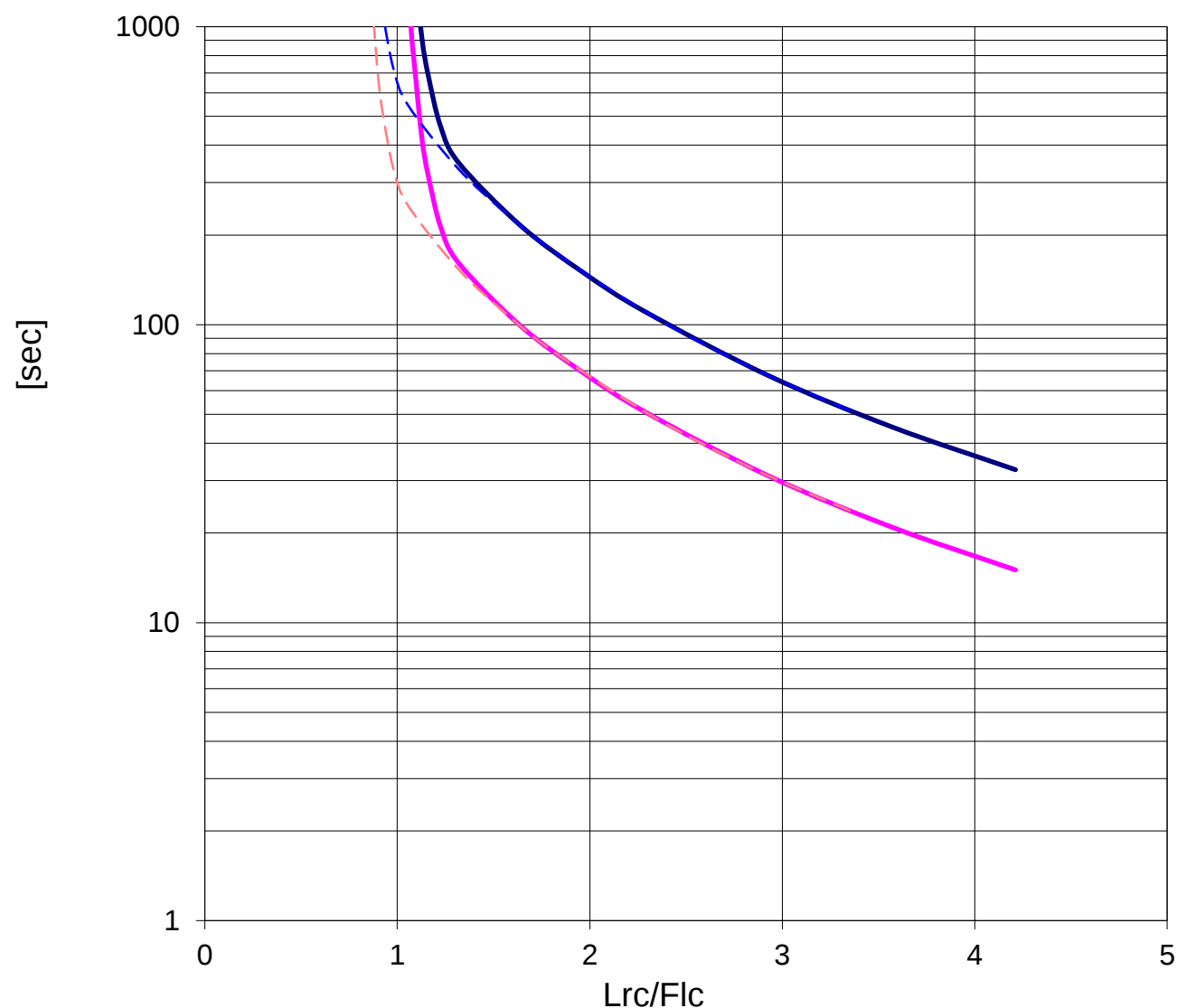
Numero d'offerta / Offer Number 2021.

Motore / Motor

AC30r 80A 6

Potenza nominale / Rated power	0,37	kW
Poli / Pole	6	
Tensione - Frequenza / Voltage - Frequency	400 - 50	V - Hz
Corrente / Rated current	0,99	A
Velocità / Speed	933	rpm
Coppia / Torque	3,79	Nm

— COLD (100% Un) — HOT (100% Un) - - COLD (80% Un) - - HOT (80% Un)



Valori calcolati - Data obtained by calculation method
Documento preliminare - Preliminary document

Data / Date 28-gen-22